



# Transportation News

A Resource for Military Transportation Engineers



Volume 15, July 1998

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## Transportation Systems 2000 Workshop

Looking for somewhere fun and exciting to go in February of 2000? Attend the Transportation Systems 2000 Workshop in San Antonio, Texas. The Army, Air Force and Navy will present the workshop on 29 February – 2 March 2000. The workshop will provide information and training through general sessions and “hands-on” seminars on military airfields, roads, and railroads for the design, maintenance and construction engineer.

It's a must attend event! Look for workshop updates in upcoming newsletters and on the TSMCX Homepage at <http://w3.nwd-mr.usace.army.mil/tsmcx/tsmcx.html>. Coming soon to an Internet site near you: Transportation Systems 2000 Workshop homepage. There will be a call for papers later this year, so stay posted.

For more information contact Mary Adolf, Transportation Systems Center, (402) 221-7265, e-mail [mary.j.adolf@usace.army.mil](mailto:mary.j.adolf@usace.army.mil).

## Secretary Scales New Heights for the TSMCX

Welcome to Bettyjo Wagner, the new secretary for the Transportation Systems Center. Ms. Wagner has brought years of clerical and bookkeeping experience to the Center. Bettyjo's husband, Greg Wagner, is a Construction Representative for Rapid Response HTRW at the Omaha District. Greg's job has taken their family around the country. As a result, Bettyjo has worked in numerous locations including the State of South Dakota, Corps offices in Elmendorf, Alaska, Rocky Mountain Area Office, and finally the Omaha District. Before coming to the Center Betty worked for 7 years with the Project Managers at the Omaha District. While in PPM Ms. Wagner was an instructor for CEFMS training and developed Omaha Districts CEFMS SOP's. Betty enjoys biking, gardening and obviously trying new adventures.



Bettyjo Wagner, TSMCX Secretary, rock climbing in Big Cottonwood Canyon, Wasatch Mountain Range, Utah

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## Secretaries

Secretaries effortlessly move mountains with a phone call, magically transform hodgepodge to well written letters, keep things organized and running smooth. A secretary is the main stem to any organization.

The Transportation Systems Center has been extremely fortunate and has had 3 outstanding secretaries in it's 8 years of existence.

Marlene Stern was the first secretary for the TSMCX. Without Marlene the TSMCX would never have gotten off the ground. Congratulations Marlene on your retirement and thank you for your dedication, hard work, and friendship.

JoAnn Gnat left the TSMCX in November of 1997 due to a reduction in force. She is now working for the Federal Department of Agriculture. Thank you JoAnn for all your outstanding work and loyalty.

Now we welcome Bettyjo Wagner to our organization who has only been with us since February 1998 but has already proven herself invaluable. Welcome Bettyjo and we look forward to working with you. 🍷

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## Let the State do the Work for You

Many states now have standard details for pavement construction on compact disk or available on the Internet. Check with the State Department of Transportation in your area.

State specifications can be used on asphalt airfield shoulders for Air Force airfield pavement projects as long as the mix meets the Marshall 50 blow, 1200-lb stability requirements. 🍷

## Technical Support During Pavement Construction

Take advantage of the following technical support services the Transportation Systems Center (TSMCX) offers for airfield pavement construction.

- Indefinite Delivery Type (IDT) Contracts - could be used for construction management services, full-time and/or part-time construction personnel, Quality Assurance (QA) inspection services, laboratory testing services, and/or provide specialized technical consulting services.
- On-site training seminar for Corps' QA and contractor's construction staff - how to construct quality airfield pavements. The seminar is tailored to specific pavement project.
- Technical consulting to construction field offices at any time during the project by experienced pavement engineers.
- Review of construction submittals and consultation on what is required to meet the specifications' intent.
- Inspection of the concrete batch plant and aggregate sources to determine if the proposed batch plant and aggregate sources meet contract specifications.
- Problem solving for contractor's mix design, equipment or procedures.
- Site-visits and consulting for airfield lighting and ILS systems, pavement removal, embankment construction, sub-base/base course placement, joint sawing/sealing, grooving, pavement marking, etc.
- Design verification inspection to verify adequacy and accuracy of existing criteria.

For more information contact Terry Sherman, Transportation Systems Center, (402) 221-7260, e-mail [terry.w.sherman@usace.army.mil](mailto:terry.w.sherman@usace.army.mil). Source: Construction Bulletin, No. 98-2, dated 2 March 1998. 🍷

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## Avoid ASR

Alkali-silica reactivity (ASR) is a major cause of deterioration of portland cement concrete pavements in the United States. For ASR to occur the following must be present in the pavement: reactive forms of silica or silicate in the aggregate; sufficient alkali (sodium and potassium) primarily from the cement; and moisture in the concrete. The alkali and silica combine to produce a gel reaction that swells as it absorbs moisture. Without the three components, expansion due to ASR cannot occur.

In the early stages of reactivity, or under conditions where only small amounts are produced, ASR gel is only detectable with a microscope. ASR may go unrecognized in pavements for some time, possibly years, before associated severe distress develops to force its recognition and rehabilitation.

ASR may be a problem encountered more frequently in the future. Aggregate sources may not have been properly checked for slow-reacting ASR in past construction projects. To avoid ASR develop a service record of aggregate sources available to a base and track aggregate performance. If you suspect ASR at your base contact the Transportation Systems Center, (402) 221-7260 for more information.

Source: *Handbook for the Identification of Alkali-Silica Reactivity in Highway Structures*, SHRP-C/FR-91-101 by David Stark, Construction Technology Laboratories, Inc., Skokie, Illinois 🍷



## Try Out the New PCASE Programs

Check out the new Airfield Design Program (ADP) and Road Design Program (Road) on the PCASE homepage at <http://pavement.wes.army.mil/pcase.html>. These programs are Windows versions and now combine both flexible and rigid design. Also available is the Windows version of Airfield Pavement Evaluation (APE). After you install the program, do a FILE ® NEW PROJECT on the main screen to get started. Be sure to "ADD" a feature before going to the design/evaluation screen. If you need help going through the new programs or have recommended changes, contact Mary Adolf, Transportation Systems Center, (402) 221-7265.

## New Additions to NEWFILE.DAT

NEWFILE.DAT is the aircraft database file used by all airfield design and evaluation programs. As requested by users the aircraft listed below have been added to NEWFILE.DAT. The latest NEWFILE.DAT may be downloaded from the PCASE homepage.

A-7	B-747	CH-53	DC-8	E-2C
B-737	C-2A	DC-10-30(KC-10)	DC-9 (C-9)	L-1011

## New Generation of Programs for On-line Use

On-line use programs allows you to run the program on-line instead of having to download large programs and install them on your hard drive. Programs on-line also give you instant access to updated programs because the programs are developed and thusly updated on-line. Currently Document Locator (DOCLOC) and Fact Sheets (FACT) are being converted to on-line use and should be available by 1999.

Plans for the future are to integrate more of the programs. For example, the Airfield Design Program (ADP) output is used in Pavement Design for Seasonal Frost (PDSF) which uses the WORLDINDEX database, the PDSF output is the read back into the ADP program. With all of these programs tied together it takes a lot of disk space and makes a good candidate for on-line use. There is concern that users in the field would not have Internet access therefore alternate means for distribution, i.e. CD ROM, is being considered.

As a demonstration of on-line potential the subsurface drainage layer calculations (from the DRAIN program) are available on-line for your review. See what you think of on-line programming by clicking on the E-DRAIN program under the draft programs at <http://pavement.wes.army.mil/pcase.html>.

## Free PCASE Workshops

We are setting up locations for PCASE Workshops. If you are interested in hosting a workshop (no cost to you) contact Mary Adolf at the above phone number. Check out the PCASE homepage for a list of currently scheduled workshops. ✉

## Save the Trees



Transportation News is now available on the Internet on the TSMCX homepage at <http://w3.nwd-mr.usace.usace.army.mil/tsmcx/tsmcx.html>. If you'd prefer to read the newsletter on-line (and save a few trees) please send an e-mail message to [mary.j.adolf@usace.army.mil](mailto:mary.j.adolf@usace.army.mil) or fill out the back page of the newsletter and fax it to (402) 221-7261. If you choose the on-line method please give your e-mail address and we will notify you when a new issue is distributed. ✉

## Document Sources

### Get the most current criteria at:

TechInfo (Corps of Engineers) – <http://www.hnd.usace.army.mil/techinfo/index.htm>

Air Force Publications – <http://afpubs.hq.af.mil/elec-products/>

Construction Criteria Base (CCB) – <http://www.ccb.org/ccb1.htm> ✉

## EIRS Bulletins on the Internet

EIRS Bulletins are now available in PDF format on the TECHINFO Internet site at <http://www.hnd.usace.army.mil/techinfo/index.htm>. Hard copies of the Bulletins will not be available after 30 September 1998. USACE offices without Internet access may designate a point of contact to receive EIRS Bulletins by e-mail in PDF format. E-mail requests to: [eirsbulletin@smtp.hnd.usace.army.mil](mailto:eirsbulletin@smtp.hnd.usace.army.mil). ✉

### TSMCX HOMEPAGE ADDRESS CHANGE

The address for the Transportation Systems Center's homepage has changed to:  
<http://w3.nwd-mr.usace.army.mil/tsmcx/tsmcx.html>

# Air Force MAJCOMs and Responsible Bases

## MAJCOM & POC

HQ ACC/CEOI  
Cliff Sander  
(757) 764-3668  
DSN 574-3668

HQ AETC/CEOE  
Frank Price  
(210) 652-2594  
DSN 487-2594

HQ AFMC/CEC  
Joe Booher  
(937) 257-6941  
DSN 787-6941

HQ AFRC/CEOM  
J. E. Dennard  
(912) 327-1036  
DSN 497-1036

HQ AFSOC/CEOE  
Bob Roof  
(850) 884-7592  
DSN 579-7592

HQ AFSPC/CECO  
William Welborn  
(719) 554-5260  
DSN 692-5260

HQ AMC/CECO  
Ken Hevner  
(618) 256-3067  
DSN 576-3067 x406

HQ ANG/CEGS  
Steve Freese  
(301) 836-8091  
DSN 278-8091

HQ PACAF/CEC  
Herb Nakashima  
(808) 449-8083  
DSN 449-8083

HQ SAFA/CEOEF  
Oral Staman  
(719) 333-4220  
DSN 333-4220

HQ USAFE/CEOI  
Al Fraga  
011-49-6371-47-6207  
DSN 480-6207

## BASES

Barksdale AFB, LA  
Beale AFB, CA  
Cannon AFB, NM  
Davis-Monthan AFB, AZ  
Dyess AFB, TX  
Ellsworth AFB, SD

Altus AFB, OK  
Columbus AFB, MS  
Goodfellow AFB, TX\*  
Keesler AFB, MS  
Lackland AFB, TX \*

Arnold AS, TN\*  
Brooks AFB, TX \*  
Edwards AFB, CA  
Eglin AFB, FL  
Hanscom AFB, MA\*

Carswell ARS\*\*  
Dobbins ARB, GA  
Gen Mitchell ARS, WI  
Grissom ARS, IN

Hurlbert Field, FL

Ascension Island, South Pacific  
Cape Canaveral AS, FL  
Cheyenne Mtn AS, CO\*\*\*  
Falcon AFB, CO\*\*\*

Andrews AFB, MD  
Charleston AFB, SC  
Dover AFB, DE  
Fairchild AFB, WA

Numersous locations in US, Puerto Rico and Guam

Andersen AFB, Guam  
Eareckson AS, AK  
Eielson AFB, AK  
Elmendorf AFB, AK

USAF Academy, CO

Aviano AB, Italy  
RAF Fairford, England  
Incirlik CDI, Turkey

Holloman AFB, NM  
Howard AFB, Panama  
Lajes Field, Azores, Portugal  
Langley AFB, VA  
Minot AFB, ND  
Moody AFB, CA

Laughlin AFB, TX  
Little Rock AFB, AR  
Luke AFB, AZ  
Maxwell AFB, AL  
Randolph AFB, TX

Hull AFB, VT  
Kirtland AFB, ND  
Kelly AFB, TX  
Los Angeles AS, CA\*  
McClellan AFB, CA

Homestead AFS, FL  
March ARB, CA  
Niagara Falls ARS, NY  
Pittsburgh, ARS, PN

F.E. Warren AFB, WY\*\*\*  
Malmstrom AFB, MT\*\*\*  
Patrick AFB, FL  
Peterson AFB, CO

Grand Forks AFB, ND  
McChord AFB, WA  
McConnell AFB, KS  
McDill AFB, FL

Galena Airport, AK  
Hickam AFB, HI  
Kadena AB, Japan  
King Salmon Airport, AK

RAF Lakenheath, England  
RAF Mildenhall, England  
Moron AB, Spain

Mt. Home AFB, ID  
Nellis AFB, NV  
Offutt AFB, NE  
Seymour Johnson AFB, NC  
Shaw AFB, SC  
Whiteman AFB, MO

Sheppard AFB, TX  
Tyndall AFB, FL  
Vance AFB, OK

Plant 42, Palmdale, CA  
Robbins AFB, GA  
Tinker AFB, OK  
Wright-Patterson AFB, OH

St. Paul ARS, MN  
Westover ARB, MA  
Willow Grove ARS, PN  
Youngstown ARS, OH

Thule AB, Greenland  
Vandenberg AFB, CA

McGuire AFB, NJ  
Pope AFB, NC  
Scott AFB, IL  
Travis AFB, CA

Kunsan AB, Korea  
Misawa AB, Japan  
Osan AB, Korea  
Yakota AB, Japan

Ramstein AB, Germany  
Rhein-Main AB, Germany  
Spangdahlem AB, Germany

\* No Airfield  
\*\* Navy owns pavement  
\*\*\* Helipad only

ARB Runways, taxiways and aprons  
ARS Taxiways and Aprons only

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## Air Force Requests TSMCX Services

The Transportation Systems Center has been asked to provide technical review services to the Air Force for major airfield pavement projects (over \$1M) designed in-house, by A-E contract or by the Navy. During the 24-26 March 98 Air Force Pavements Workshop, MAJCOM pavements engineers expressed concern with lack of adequate technical review on O&M projects designed in-house or by contract. In the past, Air Force Civil Engineering Support Agency performed reviews for the Major Commands, but no longer provide these services and the command engineers do not have the time to perform adequate reviews. The TSMCX currently provides design reviews on all airfield projects designed by the Corps of Engineers. Air Force stated that TSMCX reviews improved design and construction quality and reduced cost of construction and future maintenance. HQ AFCESA policy letter dated 20 April 1998, "Technical Review of Major Pavements Projects," provides a TSMCX POC and list of current review fees as one of the solutions to providing quality technical reviews. HQ AMC is currently developing a policy memorandum regarding TSMCX review of all future AMC airfield pavement projects (over \$1 M). For more information contact Terry Sherman, Transportation Systems Center, (402) 221-7260, e-mail [terry.w.sherman@usace.army.mil](mailto:terry.w.sherman@usace.army.mil) or Jim Greene, HQ AFCESA/CESC, DSN 523-6334, e-mail [greeneyj@afcesa.af.mil](mailto:greeneyj@afcesa.af.mil) or your MAJCOM pavement engineer. 📧

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## You Never Know...

"But what is it good for?" - Engineer at the Advanced Computing Systems Division of IBM, commenting on the microchip, 1968

"This 'telephone' has too many shortcomings to be seriously considered as a means of communication. The device is inherently of no value to us." - Western Union internal memo, 1876 📧

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## Help Available for Asphalt Emulsion Selection

Need help selecting the appropriate asphalt emulsion for construction and maintenance projects? The third edition of *The Basic Asphalt Emulsion Manual* is now available from the Asphalt Institute and the Asphalt Emulsion Manufacturers Association. The third edition has been completely updated and includes chapters on emulsion chemistry, manufacturing, storage and handling, sampling and testing, selecting the right emulsion, surface treatments, recycling with emulsions, and others. To order, contact The Asphalt Institute at (606) 288-4960. 📧

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## PAVER Assistance

Need assistance in performing PAVER surveys at installations? The U.S. Army Corps of Engineers, Tulsa District may be your answer. Tulsa District has implemented PAVER for roadways and airfields at 9 different bases and Unsurfaced PAVER at 5 bases and one highway project. Tulsa District also provided field and/or office training for 5 Corp's District offices. In additions to military projects the Tulsa District implemented PAVER for approximately 1,000 equivalent lane miles of pavements, has performed several reinspections and converted databases to MicroPAVER for several civil works projects and military bases. For more information contact Larry Stringer, USACE, Tulsa District, (918) 669-7535 or Frank Oler (918) 669-7533. 📧

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## New Document Numbers

Technical Instruction (TI) is the new nomenclature for Corps documents. There will be one parent document, TI 800. All other TIs will be under this one document. Below is a listing of the chapters of transportation systems related chapters. References to TIs will also be incorporated into the 1391 processor business.

TI 818, Geotechnical  
TI 822, Pavements  
TI 825, Airfields and Heliports  
TI 850, Railroads and Port Facilities  
TI 852, Arctic and Subarctic Construction 📧

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## Common Deficiencies on Airfield and Other Heavy Duty Pavement

The Design Construction Analysis Feedback (DCAF) Bulletin, No. 98-2, dated 6 February 1998 gives information for heavy-duty pavement construction. Deficiencies in construction of the heavy-duty pavement are related to work covered by Corps Guide Specification CEGS-02753 and failure to strictly follow the CEGS. The bulletin describes the need for the Government Quality Assurance personnel to be familiar with the requirements listed below to verify that contractor personnel are doing their job.

- Qualifications and Testing
- Aggregate Testing
- Dowels
- Paving Equipment
- Edge Slump
- Joints
- Curing 📧

## Expedient Roads Over Loose Sands

The Waterways Experiment Station (WES) has developed a new method for expedient road construction over loose sands. The new sand-fiber stabilization technology uses small amounts (0.8% by weight) of hair-like polypropylene fibers to stabilize the sand. The two-inch-long fibers are simply mixed into the top eight inches of moist sand using a self-propelled rotary mixer. A wearing surface is added by spraying a resin-modified emulsion (trade name Road Oyl) or emulsified asphalt onto the road surface. The emulsion penetrates and bonds the top inch of sand-fiber mixture. The new sand-fiber technology allows quick construction of roads over sands at remote sites using reduced equipment, manpower, and materials. The sand-fiber mixture is a very erosion resistant material that could be useful in many erosion control applications.

Experiments conducted at WES indicate that roads constructed using this new technology will carry over 10,000 passes of heavy truck traffic with very little or no maintenance required. Sand-fiber stabilization uses common construction equipment and requires no special construction skills. Sand-fiber stabilization is applicable for a wide variety of sands and silty sands found around the world (sands classified as SW, SP, SM, and some SM-SC types).

For more information contact Steve Webster, U.S. Army Engineer, Waterways Experiment Station, (601) 634-2282. ✉



## Win Your Moment in Fame

Enter your prized Portland Cement Concrete (PCC) pavement project in the American Concrete Pavement Association (ACPA) Concrete Paving Awards Program. This Awards Program is intended to encourage high quality workmanship in every concrete pavement project. Categories include concrete overlays, Whitetopping, Ultra-Thin Whitetopping, inlays, reconstruction, widening and new construction. Only projects substantially completed in 1997 are eligible.

Nominations are due by August 1, 1998. For more information contact the National Awards Program, American Concrete Pavement Association, 5420 Old Orchard Road, Suite A100, Skokie, IL 60077-1083, Phone (847) 966-ACPA, Fax (847) 966-9970, E-mail: awards@pavement.com.

Awards will be presented at the 1998 ACPA Annual Meeting in Orlando, Florida. ✉

## Design Recommendation for Railroads

There has been confusion as to the minimum size of rail required on Army projects. The following are guidelines established by the TSMCX (there may be exceptions for unusual conditions):

- When purchasing new rail, the Army should buy 115 pound (115RE) or larger rail sections. 115RE is a very commonly used section for new rail and will have replacement parts available in the future.
- Unless your project has special requirements, good quality relay (used) rail should be permitted. The Corps guide specification CE02450 RAILROADS has adequate restrictions on wear to ensure quality rail is provided. All relay rail should be tested after installation by ultrasonic methods to check for defects that can develop with handling.
- 115RE rail is not a minimum section that can be used on Army installations. Existing rail sections can be used if strengths support expected traffic. For example, if 90-lb or 100-lb sections are available in the governments' inventories, their use for relay should be evaluated and may prove the most economical. A helpful tool for evaluating rail is the TRACK computer program available at <http://pavement.wes.army.mil/pcase.html>.
- Forces Command has additional restrictions on relay rail sections. Only 115RE, 132RE, 133RE, and 136RE sections can be used for FORSCOM projects. Command approval should be obtained if other sections are being considered.

For more information contact Dan Boyer, Transportation Systems Center, (402) 221-7266. ✉



## Acronym Finder

<http://www.mtns.com/af/>

This site will find the definition of an acronym for you.

## Air Force Publications

<http://afpubs.hq.af.mil/elec-products>

The official source site for Air Force Administration Publications and Forms.

## Center for Public Works (CPW)

<http://www.usacpw.belvoir.army.mil>

Provides information about the U.S. Army CPW. Also provides a phone number for DPWs, a chat room, and publications and training available.

## Center for Transportation Research and Education

<http://www.ctre.iastate.edu>

Site provides information on research, education, and outreach from Iowa State University and Iowa Department of Transportation.

## Construction Specification Institute (CSI) Net

<http://www.csinet.org>

Site offers access to CSI's library of product information and manufacturer specifications. Gives a catalog of CSI seminars and descriptions of technical documents that may be ordered on-line.

## Federal Aviation Administration Airport Technology, R&D Branch

<http://www.airtech.tc.faa.gov>

Provides new design techniques, database of information from testing at the Denver International Airport, and information on the new testing facility.

## Midwest Concrete Consortium

<http://www.ctre.iastate.edu/mcc>

Provides an ongoing regional forum for: sharing portland cement concrete research and technology, encouraging uniform specifications, solving problems, and promoting quality design and construction.

## RoadSavers

<http://www.ota.fhwa.dot.gov/roadsvr>

More than 100 products, which include new specifications, tests, and equipment, were developed or evaluated under the Strategic Highway Research Program (SHRP). This site, created by the Federal Highway Administration, reports the results of a project to determine how SHRP products are being used.

## Sweet's Group Online

<http://www.sweets.com>

Resource guide that offers detailed data on construction products. A search function allows users to find products by category, key word, or company name.

## Training Courses Described on the Internet

The Civil Engineer and Services School (CESS) at the Air Force Institute of Technology (AFIT) offer courses on a "first-come, first-served basis". There is no tuition cost for U.S. government employees. For schedules and course descriptions go to [www.usacpw.belvoir.army.mil](http://www.usacpw.belvoir.army.mil); click on "Training" -> "Other Training Resources" -> "Air Force Institute of Technology" -> "The Civil Engineer and Services School".

American Concrete Institute (ACI) offers a seminar for concrete repair basics. For more information visit the ACI website, <http://www.aci-int.org/events/ev-idx.htm>



## Calendar of Events

### Conference on Cold Regions

Duluth, Minnesota  
27 – 30 September 1998  
POC: Karen Henry, (603) 646-4188, fax (603) 646-4640, ASCE Web site [www.asce.org](http://www.asce.org)

### SHRP Technology Exchange Conf

Hagerstown, Maryland  
13 - 14 October 1998  
(606) 288-4964, fax (606) 288-4999, e-mail: [seminars@asphaltinstitute.org](mailto:seminars@asphaltinstitute.org)

### American Society of Civil Engineering Conference

Boston, Massachusetts  
18 – 21 October 1998  
(800) 548-2723

### American Concrete Institute Convention

Los Angeles, California  
25 – 30 October 1998  
Conventions and Meetings, ACI, P.O. Box 9094, Farmington Hills, MI 48333-9094, (248) 848-3795

### Hot Mix Asphalt Conference

National Asphalt Pavement Assoc  
Portland, Oregon  
4 - 6 November 1998  
POC: Jennifer Thornberry, NAPA, (301) 731-4748, fax (301) 731-4621

### Int'l Symposium on Subdrainage in Roadway Pavements and Subgrades

Granada, Spain  
11 – 13 November 1998  
Symposium Secretariat, Asociacion Tecnica de Carreteras, C/Monte Esquinza, 24-4, Dcha, 28010, Madrid, Spain, +(34) 1 308 23 18, fax +(34) 1 308 23 19, Web site [www.piarc.inrets.fr](http://www.piarc.inrets.fr)

## E-mail Correction

In Volume 14 of *Transportation News*, dated January 1998, the e-mail address for the CADD-GIS Technology Center at the Waterways Experiment Station should be <http://tsc.wes.army.mil>.



## Update Your Mailing Address

- o Add me to your mailing list.
- o I'll read the newsletter on-line, but use my e-mail address to notify me when a new issue is out. Please delete me from your mailing list.
- o Delete me from your mailing list.
- o Address correction.

Name \_\_\_\_\_

Organization/Office Symbol \_\_\_\_\_

Address \_\_\_\_\_

City/State/Zip \_\_\_\_\_

E-Mail \_\_\_\_\_

Phone Number \_\_\_\_\_

Fax this page to Mary Adolf, Transportation Systems Center, FAX (402) 221-7261 or e-mail a message to mary.j.adolf @usace.army.mil.



## Transportation News

U.S. ARMY CORPS OF ENGINEERS  
TRANSPORTATION SYSTEMS CENTER  
215 NORTH 17TH STREET  
OMAHA, NEBRASKA 68102-4978

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OFFICIAL BUSINESS

### TRANSPORTATION SYSTEMS CENTER

If you have any questions on transportation systems, let us hear from you.

U.S. Army Corps of Engineers  
Transportation Systems Center  
215 North 17<sup>th</sup> Street  
Omaha, NE 68102-4978

#### Homepage

<http://w3.nwd-mr.usace.army.mil/tsmcx/tsmcx.html>

**Terry Sherman,**  
Director  
(402) 221-7260

**Bettyjo Wagner**  
(402) 221-7264

**Mary Adolf**  
(402) 221-7265

**Dan Boyer**  
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**John Gregory**  
(402) 221-7267

**Kordon Kiel**  
(402) 221-7268

**Gainard Mattke**  
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